

Amendments to the Claims:

Listing of the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-8 (canceled)

9. (currently amended) A method for ~~promoting~~ increasing bone density in a mammalian subject in need of the same deposition comprising: administering to a the mammalian subject a therapeutically effective amount of ~~an agent selected from the group consisting of activated vitamin D binding protein (ADBP), one or more DBP peptides, and combinations thereof.~~

10. (original) The method of claim 9 wherein the ADBP comprises a galactosamine attached to a threonine or a serine located in domain III.

11. (currently amended) ~~The~~ A method of claim 9 for increasing bone density in a mammalian subject in need of the same, comprising administering to the mammalian subject a therapeutically effective amount of one or more peptides selected from a peptide that is 3 amino acids in length and comprises the first 3 consecutive amino acids of SEQ ID NO. 1, a peptide that is 4 amino acids in length and comprises the first 4 consecutive DBP, wherein the DBP peptide, from 3 to 13 amino acids in length and comprises the first 3 to 13 amino acids of SEQ ID NO. 1, a peptide that is 5 amino acids in length and comprises the first 5 consecutive amino acids of SEQ ID NO. 1, a peptide that is 6 amino acids in length and comprises the first 6 consecutive amino acids of SEQ ID NO. 1, a peptide that is 7 amino acids in length and comprises the first 7 consecutive amino acids of SEQ ID NO. 1, a peptide that is 8 amino acids in length and comprises the first 8 consecutive amino acids of SEQ ID NO. 1, a peptide that is 10 amino acids in length and comprises the first 10 consecutive amino acids of SEQ ID NO. 1, a peptide that is 11 amino acids in length and comprises the first 11 consecutive amino acids of SEQ ID NO. 1, a peptide that is 12 amino acids in length and comprises the first 12 consecutive amino acids of SEQ ID NO. 1, a peptide that is 13 amino acids in length and comprises the first 13 consecutive amino acids of SEQ ID NO. 1, and a peptide that is 14 amino acids in length and comprises the amino acid sequence of SEQ ID NO. 1.

12. (currently amended) The method of claim 11 wherein the ~~DBP~~ peptide lacks a sugar moiety.

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13. (currently amended) The method of claim 11 wherein the ~~DBP~~-peptide comprises a sugar residue attached to the threonine residue at position 3 of the peptide.

14. (original) The method of claim 13 wherein the sugar residue is an N-acetylgalactosamine.

15. (currently amended) The method of claim 11, wherein at least one of the one or more the DBP peptides is 10 amino acids in length and comprises the first 10 consecutive amino acids of SEQ ID NO. 1 ~~is from 12 to 18 amino acids in length and comprises a sequence which is at least 70% identical to a sequence of a peptide fragment from domain III of DBP, wherein the third amino acid of said peptide fragment is the threonine that is glycosylated in DBP.~~

16. (currently amended) The method of claim ~~15~~ 11, wherein at least one of the one or more the peptides is four amino acids in length and comprises the first 4 consecutive amino acids of ~~comprises a sequence which is at least 70% identical to-SEQ ID NO. 1.~~

17. (currently amended) The method of claim 9, wherein ~~the agent~~ ADBP is administered by systemic injection.

18. (currently amended) The method of claim 9, wherein ~~the agent~~ ADBP is administered by local injection or infusion.

19. (currently amended) The method of claim 9, wherein ~~the agent~~ ADBP is administered at least twice during a four day period.

20. (currently amended) The method of claim 9, wherein ~~the agent~~ ADBP is administered orally.

21. (canceled)

22. (new) The method of claim 11, wherein the one or more peptides are administered by systemic injection.

23. (new) The method of claim 11, wherein the one or more peptides are administered by local injection or infusion.

24. (new) The method of claim 11, wherein the one or more peptides are administered at least twice during a four day period.

25. (new) The method of claim 11, wherein the one or more peptides are administered orally.

26. (new) The method of claim 11, wherein the one or more peptides are administered in combination with ADBP.

27. (new) The method of claim 11, wherein at least one of the one or more peptides is 12 amino acids in length and comprises the first 12 consecutive amino acids of SEQ ID NO. 1.

28. (new) The method of claim 11, wherein at least one of the one or more peptides is 11 amino acids in length and comprises the first 11 consecutive amino acids of SEQ ID NO. 1.

29. (new) The method of claim 11, wherein at least one of the one or more peptides is 14 amino acids in length and comprises the amino acid sequence of SEQ ID NO. 1.

30. (new) A method of treating a mammalian subject with a disease or disorder involving bone loss comprising:

administering to the subject a therapeutically effective amount of one or more peptides selected from a peptide that is 4 amino acids in length and comprises the first 4 consecutive amino acids of SEQ ID NO. 1, a peptide that is 5 amino acids in length and comprises the first 5 consecutive amino acids of SEQ ID NO. 1, a peptide that is 6 amino acids in length and comprises the first 6 consecutive amino acids of SEQ ID NO. 1, a peptide that is 7 amino acids in length and comprises the first 7 consecutive amino acids of SEQ ID NO. 1, a peptide that is 8 amino acids in length and comprises the first 8 consecutive amino acids of SEQ ID NO. 1, a peptide that is 10 amino acids in length and comprises the first 10 consecutive amino acids of SEQ ID NO. 1, a peptide that is 11 amino acids in length and comprises the first 11 consecutive amino acids of SEQ ID NO. 1, a peptide that is 12 amino acids in length and comprises the first 12 consecutive amino acids of SEQ ID NO. 1, a peptide that is 13 amino acids in length and comprises the first 13 consecutive amino acids of SEQ ID NO. 13, and a peptide that is 14 amino acids in length and comprises the amino acid sequence of SEQ ID NO. 1.

31. (new) The method of claim 30 wherein the subject has osteoporosis.

32. (new) The method of claim 30, wherein the subject has osteogenesis imperfecta.

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33. (new) The method of claim 30, wherein the subject has a spine injury.
34. (new) The method of claim 30, wherein the subject has periodontal disease.
35. (new) The method of claim 30, wherein the subject has an osteopenia.
36. (new) The method of claim 30, wherein the subject has a bone fracture.
37. (new) The method of claim 30, wherein the subject has bone necrosis.
38. (new) The method of claim 30, wherein the one or more peptides are administered systemically.
39. (new) The method of claim 30, wherein the one or more peptides are administered locally.
40. (new) The method of claim 30, wherein the one or more peptides are administered orally.